

State Highway Patrol Mapping Tool



TRAINING MANUAL

Revised May 2016

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TABLE OF CONTENTS

INTRODUCTION	5
GETTING STARTED.....	5
MODOT HP MAPS DIALOG BOX	7
<i>Search Dialog Box</i>	7
Roadway Name	8
Travelway Near a Longitude and Latitude	13
Travelway ID	15
<i>Show Log Book</i>	17
Choosing an Intersection.....	20
Show ERM.....	23
Hide ERM	23
Offset.....	24
<i>Base Map</i>	25
<i>Zoom Button</i>	26
City Search.....	26
County Search.....	27
ZOOMING/MOVING MAP	28
CONTACTS:	29
AFTER HOURS CONTACT:	29

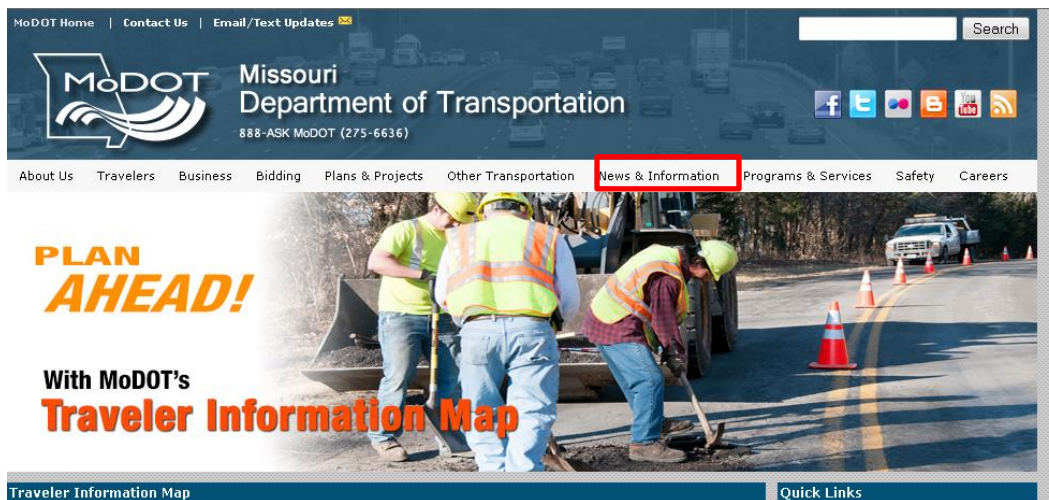
Introduction

The Highway Patrol Mapping Tool has recently been updated. It is now more user friendly when looking for crash locations. Some of the features consist of easier zooming into a particular location, having the longitude and latitude in the look-up box, and the ability to have the Emergency Reference Markers (ERMs) displayed on the map.

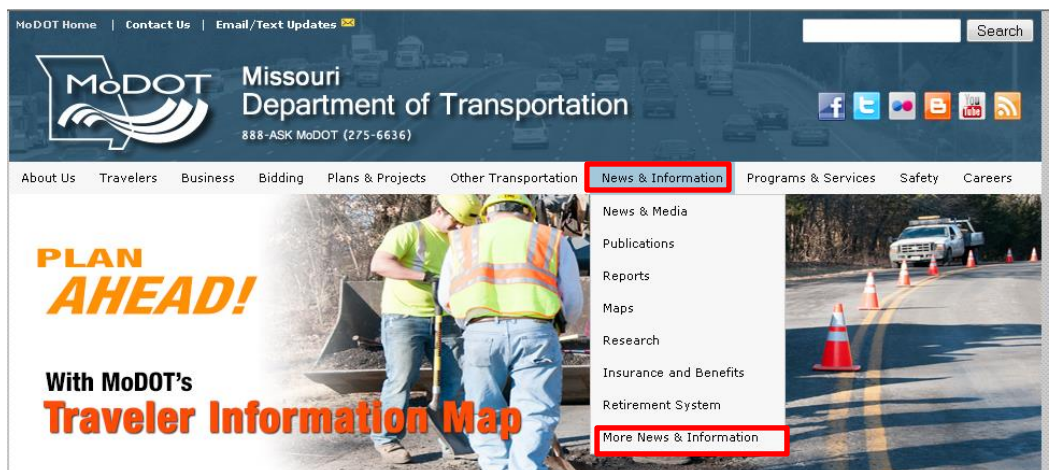
The web pages will appear different but will function in the same way.

Getting Started

To start working with the HP Mapping Tool, to locate the application on the Missouri Department of Transportation Home Page.



- Under “News & Information”, a drop-down list will appear.
- From the list, choose “More News & Information”.



- Scroll through the web page to find “General” heading.

Publications

- 2013 Official State Highway Map
- Highway User Revenue - Local Government Distribution
- *Connections* MoDOT's Employee Newsletter
- Roadside Review
- Annual / Accountability Reports
- Meet MoDOT (1.41mb) 

Research

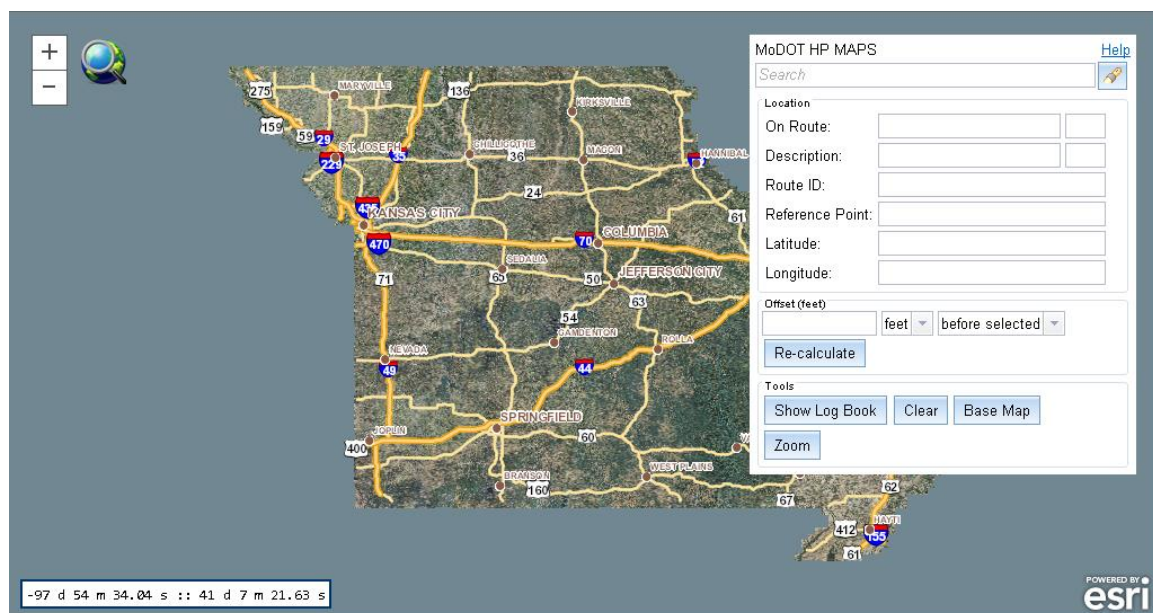
- Research
- Innovative Solutions
- Innovation Library

General

- MoDOT Centennial
- Missouri Pothole Patrol
- Embracing Diversity
- Environmental & Historic Preservation
- Functional Classification Maps
- County Maps
- Human Resources Policy Manual
- MoDOT & Patrol Employees' Retirement System
- Intro page to MoDOT retirement system
- Risk Management Manual
- MoDOT/State Patrol Benefits and Insurance
- **State Highway Patrol Mapping Tool**
- ~~State Highway Patrol Location Book~~
(service for law-enforcement agencies only)
- TEAM Conference
- Traffic Volume Maps
- Transportation Links
- Share Leave FAQ

- Under the “General” heading, choose “State Highway Patrol Mapping Tool”.

The following web page will be displayed.



MoDOT HP MAPS Dialog Box

Search Dialog Box

To find a travelway, click on any of the travelways or use the search box. The samples below indicate what text should be entered in the search box when searching by route, latitude/longitude or travelway ID.

Example: Road name

- Interstate 44: "IS 44"
- US 54 West in Cole County: "US 54 W COLE"
- Route T: "RT T"

Example: Travelways around a latitude/longitude

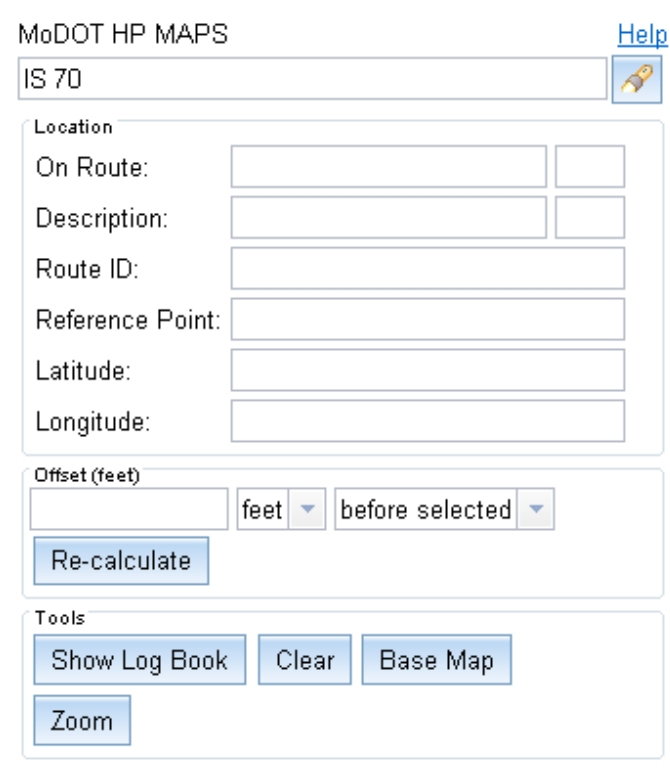
- Latitude 38.1, Longitude -91.2: "38.1 -91.2"
- Latitude 38.1, Longitude -91.2: "-91.2 38.1"

Example: Travelway ID

- Travelway ID 19: tw 19
- Travelway ID 19: twid 19
- Travelway ID 19: travelway 19

Roadway Name

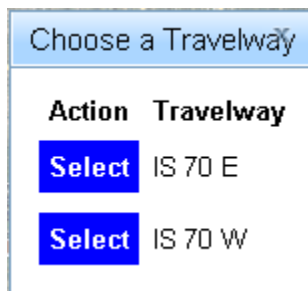
As you can see from the previous page, there are several ways to enter information into the search box. To search by roadway name, enter “IS 70” the search box.



The image shows the MoDOT HP MAPS search interface. At the top, there is a search box containing "IS 70" and a "Help" link. Below the search box is a "Location" section with fields for "On Route:", "Description:", "Route ID:", "Reference Point:", "Latitude:", and "Longitude:". Below the "Location" section is an "Offset (feet)" section with a text input, a "feet" dropdown, and a "before selected" dropdown. Below the "Offset (feet)" section is a "Re-calculate" button. Below the "Re-calculate" button is a "Tools" section with buttons for "Show Log Book", "Clear", "Base Map", and "Zoom".

- Type “IS 70” – put a space between the “S” and the “7” or you will get a listing for ramps.
- Press the “Enter” key on your keyboard.

The following dialog box will be displayed.

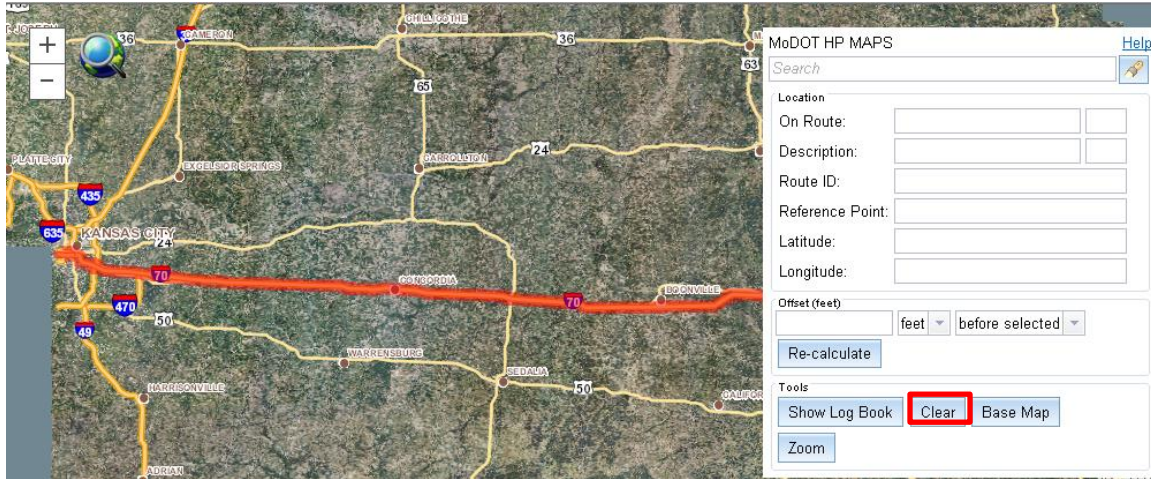


The image shows a dialog box titled "Choose a Travelway". It contains a table with two columns: "Action" and "Travelway".

Action	Travelway
Select	IS 70 E
Select	IS 70 W

- Click the “Select” button next to the travelway to be displayed.
- For this example, choose IS 70 E.

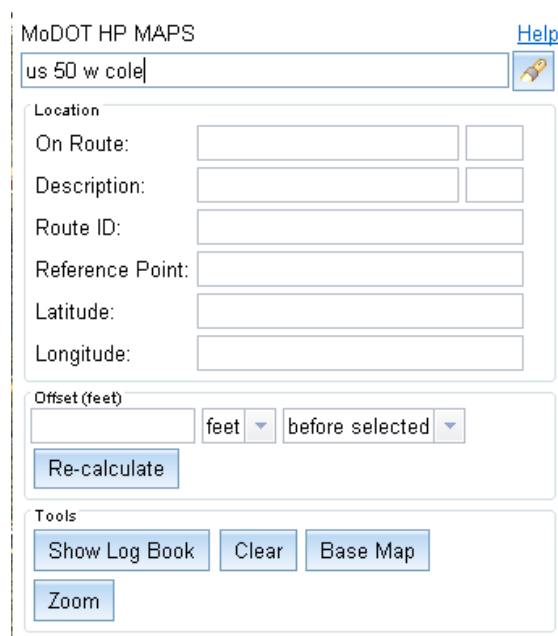
The following results will be displayed.



The entire route of IS 70 is indicated by the red line on the map.

Another way to search for a travelway is to drill down closer to a specific area.

- Click on the “Clear” button on the search dialog box to prepare for a new search.
- In the search box, enter “US 54 W Cole” – make sure there are spaces between the designation, name, direction and county.
- Press the “Enter” key on the keyboard.



The following results will be displayed.



As you can see, US 54 W in Cole County is highlighted in red.

Here's an example of how to search for a lettered route.

- Click on the "Clear" button on the search dialog box.
- Enter "RT T".
- Press the "Enter" key on your keyboard.

The following results will be displayed.

Choose a Travelway

Action	Travelway
Select	RT T E, WILDWOOD, ST. LOUIS Co
Select	RT T E, CALLAWAY Co
Select	RT T E, AUDRAIN Co
Select	RT T E, GRUNDY Co
Select	RT T E, MERCER Co
Select	RT T E, CLINTON Co
Select	RT T E, DOUGLAS Co
Select	RT T E, ST. CLAIR Co
Select	RT T N, GASCONADE Co
Select	RT T N, MARIES Co
Select	RT T N, ST. CHARLES Co
Select	RT T N, COLE Co

MoDOT HP MAPS
Help

RT T

Location

On Route:

Description:

Route ID:

Reference Point:

Latitude:

Longitude:

Offset (feet)

feet

before selected

Re-calculate

Tools

Show Log Book

Clear

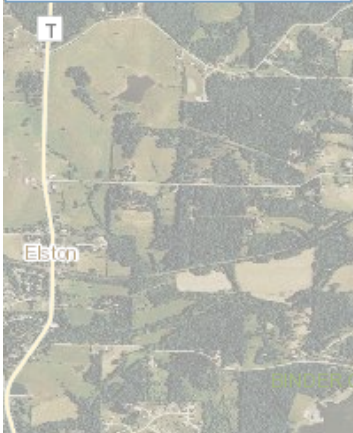
Base Map

Zoom

As you can see on the “Choose a Travelway” box, every county with a RT T is displayed. Since there are many RT Ts within the state, the counties have been added for easier look up. Minimize the list by entering the county name in the search box.

Choose a Travelway

Action	Travelway
Select	RT T N, PETTIS Co
Select	RT T S, PETTIS Co



MoDOT HP MAPS

Help

rt t pettis

Location

On Route:

Description:

Route ID:

Reference Point:

Latitude:

Longitude:

Offset (feet)

feet

before selected

Re-calculate

Tools

Show Log Book

Clear

Base Map

Zoom

Both directions appears for RT T in Pettis County.

- Select the desired direction, and the travelway will be highlighted in red in Pettis County.



Travelway Near a Longitude and Latitude

You can also search for a location by entering latitude and longitude.

- Click the “Clear” button on the search page.
- Enter the longitude and latitude in the search dialog box.
 - Latitude 38.7751, Longitude -92.2807: "38.7751 -92.2807"
 - Latitude 38.7751, Longitude -92.2807: "-92.2807 38.7751"
- Press the “Enter” key on your keyboard.

The longitude and latitude can be entered in any order.

Action	Travelway
Select	RT DD N [BOONE]
Select	RT DD S [BOONE]
Select	RT M E [BOONE]
Select	RT M W [BOONE]
Select	CRD PALIS NICHOLS RD N [BOONE]
Select	CRD PALIS NICHOLS RD S [BOONE]

MoDOT HP MAPS [Help](#)

38.7751 -92.2807

Location

On Route:

Description:

Route ID:

Reference Point:

Latitude:

Longitude:

Offset (feet) miles before selected

[Re-calculate](#)

Tools

[Show Log Book](#) [Clear](#) [Base Map](#)

[Zoom](#)

By picking the longitude and latitude, you can see that six travelways in Boone County are displayed.

- Select the Travelway CRD PALIS NICHOLS RD S in Boone County.

The following map will be displayed.



Travelway ID

A third way to search for a location is to search by travelway ID. If the travelway ID is known, enter it into the system using one of the three ways listed below.

- Click on the “Clear” button to clear the search dialog box.
- Enter the travelway ID.
 - Travelway ID 19: tw 19
 - Travelway ID 19: twid 19
 - Travelway ID 19: travelway 19
- Press the “Enter” key on your keyboard.

The screenshot shows the MoDOT HP MAPS interface. On the left, a 'Choose a Travelway' dialog box is open, displaying a list of travelways for IS 70 E across various counties. Each entry has a 'Select' button. The travelway 'IS 70 E, COOPER Co' is highlighted in red. On the right, the main map area shows a satellite view of a road network. The 'tw 19' search term is entered in the search bar. Below the search bar, there are input fields for 'Location', 'On Route', 'Description', 'Route ID', 'Reference Point', 'Latitude', and 'Longitude'. There is also an 'Offset (feet)' section with a text input, a 'feet' dropdown, and a 'before selected' dropdown. A 'Re-calculate' button is located below these fields. At the bottom, there is a 'Tools' section with buttons for 'Show Log Book', 'Clear', 'Base Map', and 'Zoom'. The map itself shows a road labeled 'H' and a nearby area labeled 'Georgetown'.

Action	Travelway
Select	IS 70 E, JACKSON Co
Select	IS 70 E, LAFAYETTE Co
Select	IS 70 E, SALINE Co
Select	IS 70 E, COOPER Co
Select	IS 70 E, BOONE Co
Select	IS 70 E, CALLAWAY Co
Select	IS 70 E, MONTGOMERY Co
Select	IS 70 E, WARREN Co
Select	IS 70 E, ST. CHARLES Co
Select	IS 70 E, ST. LOUIS Co
Select	IS 70 E, ST. LOUIS CITY Co

As you can see, IS 70 E is listed by county. Select the desired county, and the travelway will be highlighted in red for that county. For this example, select IS 70 E in Cooper County.

- Click the “Select” button next to IS 70 E, Cooper County.



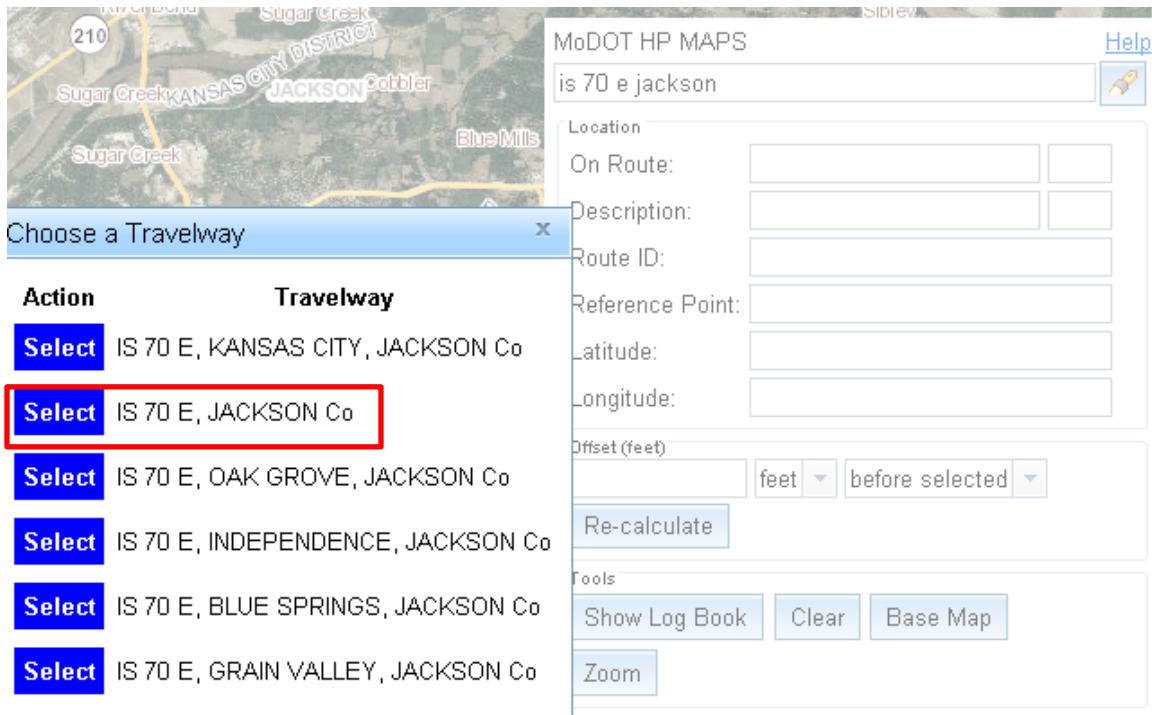
The route for IS 70 E in Cooper County is highlighted in red.

NOTE: *In the search box, the travelway information is not case sensitive. This allows you to enter the travelway information in any format (for example, is 70 e or IS 70 E). Also, press the “Clear” button to perform a new search.*

Show Log Book

After locating the travelway where the crash occurred, use the “Show Log Book” button to see all the intersecting streets and bridges for that travelway.

- Clear the search box.
- Enter the search criteria (see below).
- Press the “Enter” button on the keyboard – the map shows the route highlighted in red.
- The “Choose a Travelway” dialog box will be displayed – press the “Select” button next to IS 70 E, Jackson County.
- Click on the “Show Log Book” button.



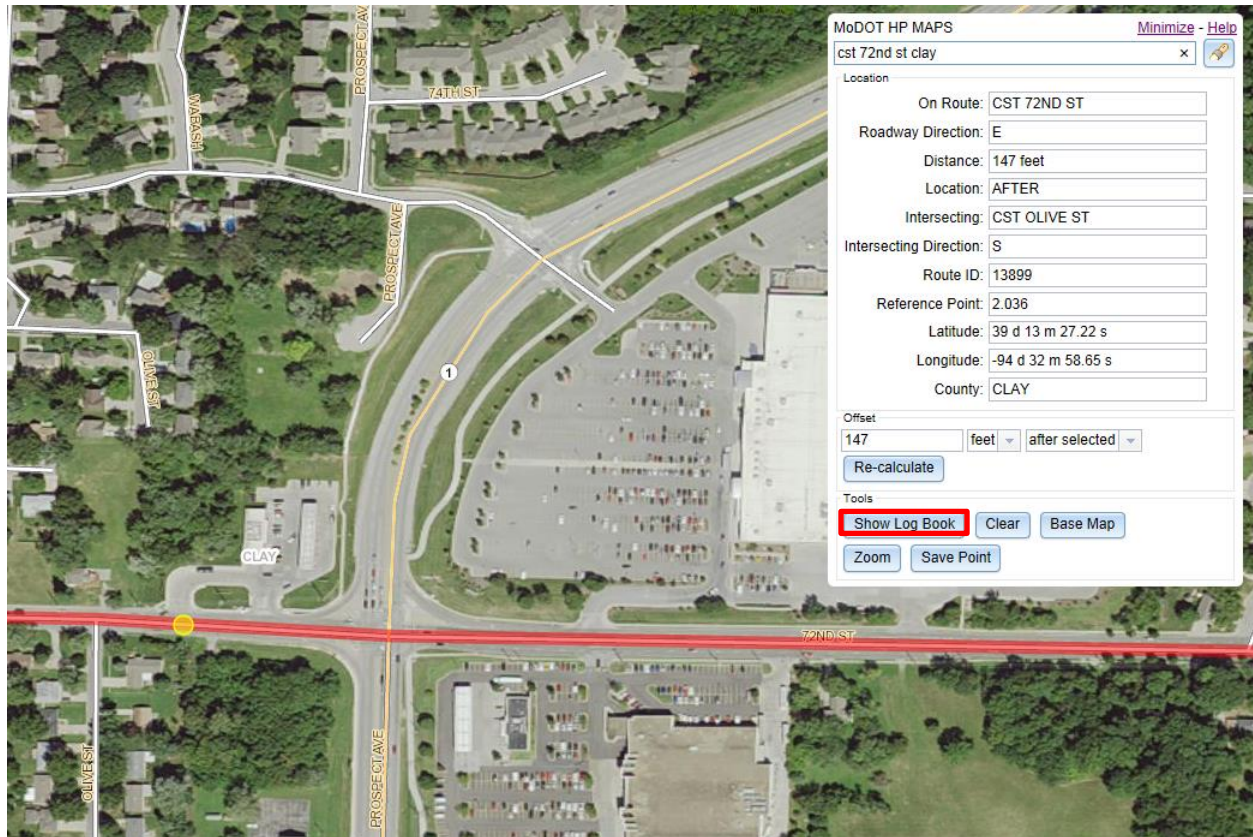
The screenshot shows the MoDOT HP MAPS interface. The search box contains 'is 70 e jackson'. Below the search box is a 'Choose a Travelway' dialog box with a table of travelway options. The table has two columns: 'Action' and 'Travelway'. The second row, 'IS 70 E, JACKSON Co', is highlighted with a red border. To the right of the dialog box is a form with fields for 'Location', 'On Route', 'Description', 'Route ID', 'Reference Point', 'Latitude', 'Longitude', and 'Offset (feet)'. Below the form are buttons for 'Re-calculate', 'Show Log Book', 'Clear', 'Base Map', and 'Zoom'.

Action	Travelway
Select	IS 70 E, KANSAS CITY, JACKSON Co
Select	IS 70 E, JACKSON Co
Select	IS 70 E, OAK GROVE, JACKSON Co
Select	IS 70 E, INDEPENDENCE, JACKSON Co
Select	IS 70 E, BLUE SPRINGS, JACKSON Co
Select	IS 70 E, GRAIN VALLEY, JACKSON Co



Once you click on the map, if the intersection closest to the crash is not the intersection you wish to reference, use the “Show Log Book” button to display all of the available intersections. For example, a crash happened on CST 72ND St., and it automatically entered the intersection of CST Olive St. Use the “Show Log Book” button to pick the intersection that best meets the needs of

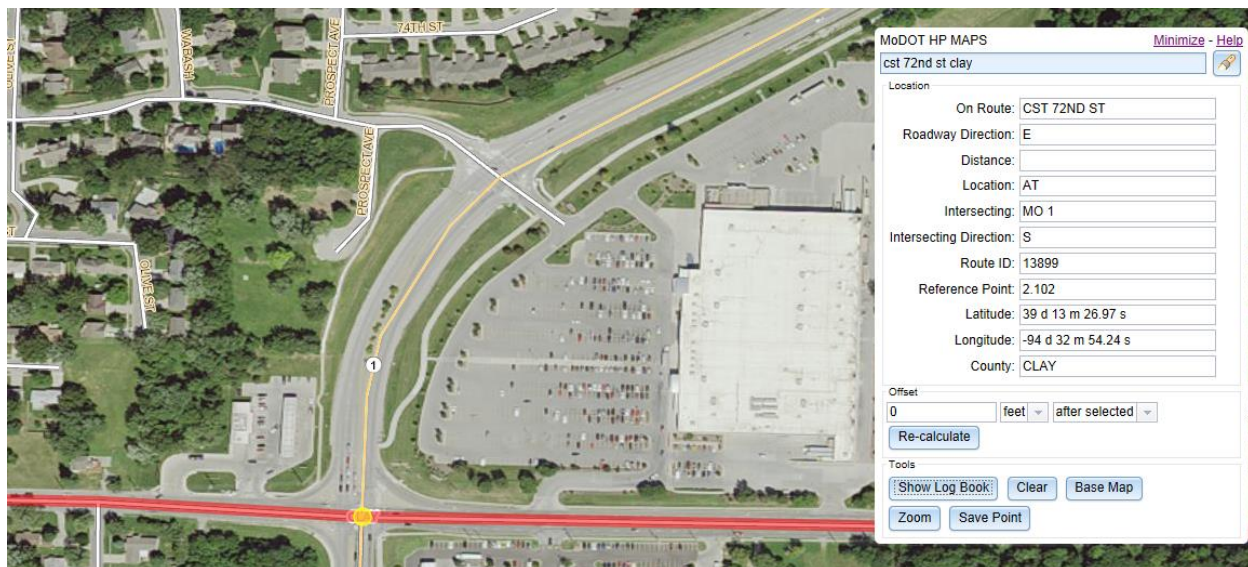
your situation, such as MO 1 South. You can also use the offset field to adjust the crash location as needed.



Log Book			
CST HARRISON ST S	1.011	CLAY	
CST HARRISON ST S	1.048	CLAY	
CST TROOST AVE S	1.112	CLAY	
CST FOREST AVE S	1.211	CLAY	
CST TRACY AVE S	1.268	CLAY	
CST FLORA AVE S	1.334	CLAY	
CST FLORA AVE S	1.357	CLAY	
CST KRANZ RD S	1.386	CLAY	
CST ROSEWOOD DR E	1.386	CLAY	
CST HIGHLAND AVE S	1.506	CLAY	
CST N WOODLAND AVE S	1.577	CLAY	
CST WOODLAND AVE S	1.634	CLAY	
CST EUCLID AVE S	1.634	CLAY	
CST EUCLID CT S	1.694	CLAY	
CST BROOKLYN AVE S	1.882	CLAY	
CST PARK AVE S	1.925	CLAY	
CST OLIVE ST S	2.008	CLAY	
CST PROSPECT AVE S	2.102	CLAY	
MO 1 S	2.102	CLAY	
MO 1 N	2.102	CLAY	
CST BELLEFONTAINE AVE S	2.376	CLAY	

Search

- Select the correct route.
- Close the “Log Book” by clicking the “Hide Log Book” button.



Choosing an Intersection

Click on an intersecting street to select it, and a yellow dot will appear on the map for that location.

- Scroll through the intersections and bridges in the listing.
- Select the intersection –MO 9 S.

Log Book			
RP IS35N TO IS35N N		1.041	JACKSON
IS 35 N	WJ	1.041	JACKSON
RP US169S TO IS35N N	WJ	1.05	JACKSON
CST BROADWAY S		1.05	JACKSON
US 169 N	EJ	1.06	JACKSON
RR UNKNOWN S		1.095	JACKSON
RP US169S TO IS35N N	MJ	1.198	JACKSON
CST WYANDOTTE ST S		1.211	JACKSON
RP IS35N TO SIXTH ST E		1.234	JACKSON
CST DELAWARE ST S		1.304	JACKSON
RP SIXTH ST TO IS35N E		1.407	JACKSON
CST WALNUT ST S		1.416	JACKSON
CST GRAND AVE S		1.486	JACKSON
RP IS35N TO MO9N N	MJ	1.499	JACKSON
RP IS35N TO SIXTH ST E		1.499	JACKSON
RP MO9S TO IS35N S	MJ	1.606	JACKSON
CST HEART OF AMERICA BRDG S		1.652	JACKSON
MO 9 S		1.652	JACKSON
MO 9 N		1.659	JACKSON

Show ERM

Hide ERM

Hide Log Book

All of the intersections and bridges are listed. Use the scroll bar to see all of the intersections and bridges for Jackson County.

Log Book			
IS 35 N	WJ	1.041	JACKSON
RP IS35N TO IS35N N		1.041	JACKSON
RP US169S TO IS35N N	WJ	1.05	JACKSON
CST BROADWAY S		1.05	JACKSON
US 169 N	EJ	1.06	JACKSON
RR UNKNOWN S		1.095	JACKSON
RP US169S TO IS35N N	MJ	1.198	JACKSON
CST WYANDOTTE ST S		1.211	JACKSON
RP IS35N TO SIXTH ST E		1.234	JACKSON
CST DELAWARE ST S		1.304	JACKSON
RP SIXTH ST TO IS35N E		1.407	JACKSON
CST WALNUT ST S		1.416	JACKSON
CST GRAND AVE S		1.486	JACKSON
RP IS35N TO MO9N N	MJ	1.499	JACKSON
RP IS35N TO SIXTH ST E		1.499	JACKSON
RP MO9S TO IS35N S	MJ	1.606	JACKSON
MO 9 S		1.652	JACKSON
CST HEART OF AMERICA BRDG S		1.652	JACKSON
MO 9 N		1.659	JACKSON

A black line will appear underneath the intersection when hovering over it before selecting.

- Click on the intersection.
- Click the “Hide Log Book” button.

There will be a yellow dot where “IS 70 E” crosses “MO 9 S”.



The “MoDOT HP MAPS” dialog box will be filled out with the information pertaining to that location.

MoDOT HP MAPS

[Help](#)

Search

Location

On Route:

IS 70

E

Description:

MO 9

S

Route ID:

19

Reference Point:

1.652

Latitude:

39 d 6 m 23.57 s

Longitude:

-94 d 34 m 37.45 s

Offset (feet)

0

feet

before selected

Re-calculate

Tools

Show Log Book

Clear

Base Map

Zoom

Show ERM

MoDOT has ERM's located on all interstates and a few US travelways. To see the ERM's for a route, click the "Show ERM" button. After clicking on the button, the ERM's will be listed. They are located every 0.2 mile.

Log Book				
Description	Jct	Log Mile	County	
US 40 E	0	0	JACKSON	
US 24 E	WJ	0	JACKSON	
US 169 N	WJ	0	JACKSON	
ERM EAST IS 70 MILE 0.0	0		JACKSON	
BRIDGE A5658 CST LIBERTY ST, CST MULB	0		JACKSON	
BEGIN JACKSON COUNTY	0		JACKSON	
ERM EAST IS 70 MILE 0.2	0.137		JACKSON	
CST WYOMING ST S	0.173		JACKSON	
ERM EAST IS 70 MILE 0.4	0.287		JACKSON	
CST MULBERRY ST S	0.444		JACKSON	
ERM EAST IS 70 MILE 0.6	0.528		JACKSON	
RP IS70E TO IS35S S	0.6		JACKSON	
CST MADISON AVE S	0.681		JACKSON	
RP IS35N TO IS70W W	0.685		JACKSON	
ERM EAST IS 70 MILE 0.8	0.77		JACKSON	
RP IS70E TO BEARDSLEY RD S	0.775		JACKSON	
RR UNKNOWN S	0.812		JACKSON	

Show ERM Hide ERM Hide Log Book

Hide ERM

To turn off the ERM's, just click the "Hide ERM" button, and they will be removed from the intersecting list.


Log Book				
Description	Jct	Log Mile	County	
US 40 E	0	0	JACKSON	
US 24 E	WJ	0	JACKSON	
US 169 N	WJ	0	JACKSON	
BRIDGE A5658 CST LIBERTY ST, CST MULB	0		JACKSON	
BEGIN JACKSON COUNTY	0		JACKSON	
CST WYOMING ST S	0.173		JACKSON	

Offset

A crash may not have occurred directly at an intersection. Use the “Offset” dialog box to locate the crash in the correct location.

For example, here is the intersection that was originally located.

MoDOT HP MAPS [Help](#)

Search 

Location

On Route: IS 70 E

Description: MO 9 S

Route ID: 19

Reference Point: 1.652

Latitude: 39 d 6 m 23.57 s

Longitude: -94 d 34 m 37.45 s

Offset (feet): 0 feet before selected

Re-calculate

Tools

Show Log Book Clear Base Map

Zoom

For this example, the crash occurred 36 feet after MO 9 S.

- Enter “36” in the “Offset” box – there will be an option for feet or miles.
- In the drop-down box choose “after selected”,
- Click the “Re-calculate” button.

The new calculations of the crash location are shown below.

MoDOT HP MAPS

Search

Help

Location

On Route:

IS 70

E

Description:

36 feet after MO 9

S

Route ID:

19

Reference Point:

1.65

Latitude:

39 d 6 m 23.57 s

Longitude:

-94 d 34 m 37.02 s

Offset (feet)

36

feet

after selected

Re-calculate

Tools

Show Log Book

Clear

Base Map

Zoom

Base Map

The “Base Map” button on the “MoDOT HP MAPS” window is used to change the look of the map. The default map shows the roads with aerial photography in the background.



When clicking on the Base Map, the aerial photography is turned off.

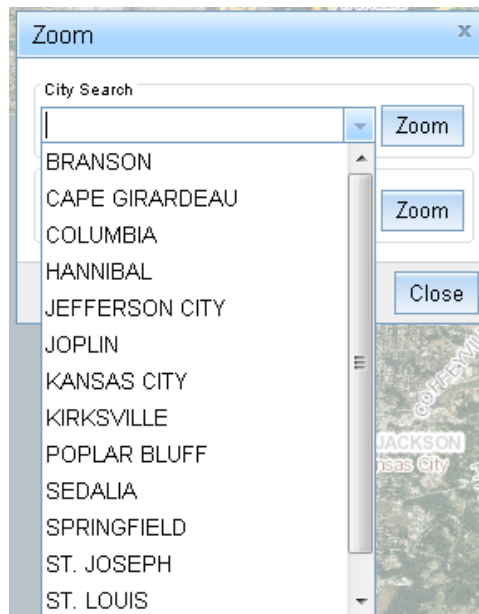


Zoom Button

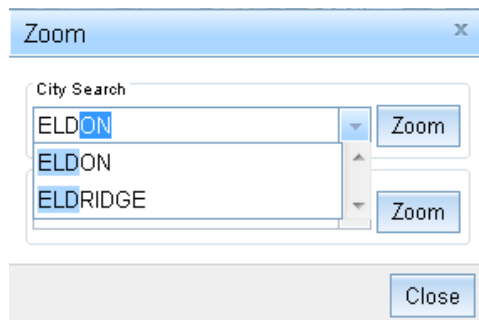
A “Zoom” button has been added to the main panel. The “Zoom” button will display two dialog boxes: “City Search” and “County Search”.

City Search

When clicking on the drop-down arrow next to the “City Search”, only the most populous cities and a few more key areas around the state are displayed. The reason for the limited number of cities is because there are too many to list in the drop-down box.



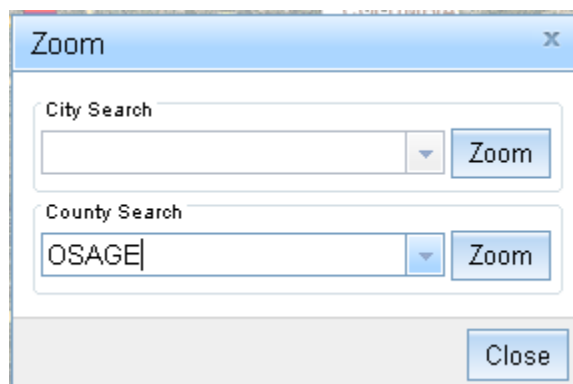
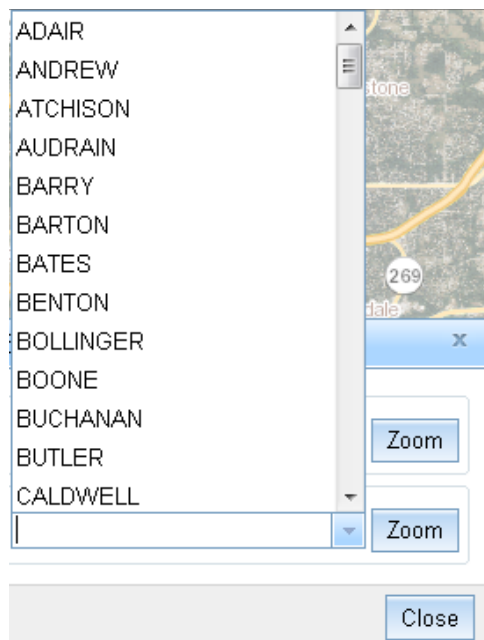
When you begin typing a city, most any city in Missouri (“Eldon”, for instance), it will search for that city and auto-complete the name.



After selecting a city, click the “Zoom: button, and it will zoom to that area.

County Search


All counties will be shown when clicking the county drop-down arrow. There's also the option of typing a county name.



After selecting the county, click the “Zoom” button, and it will zoom to that area.

NOTE: To clear the city or county search, just put the cursor at the end of the city or county and click the “Backspace” key or highlight the name and click the “Delete” key.

Zooming/Moving Map

In order to move the map to get a better view of the crash location, left click the mouse button, and a quad arrow  will appear. You can drag the arrow in any direction, and the map will move in the direction that you drag the mouse.

You can zoom to a location in three ways. The first way is to use the zoom in button (+) on the map.



- Click on the plus button, and the map will automatically zoom in to the location.
- Click on the minus button, and the map will automatically zoom out of the location.

The second way to zoom into the crash location is by holding down the “Shift” key and drawing a box around the area with the left mouse button.

The third way is to double click to zoom in.



- This button zooms to a state level view.

NOTE: *Zoom to a certain level in order to see the exit numbers.*

Contacts:

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